

FIG. 1 (PRIOR ART)

FIG. 2

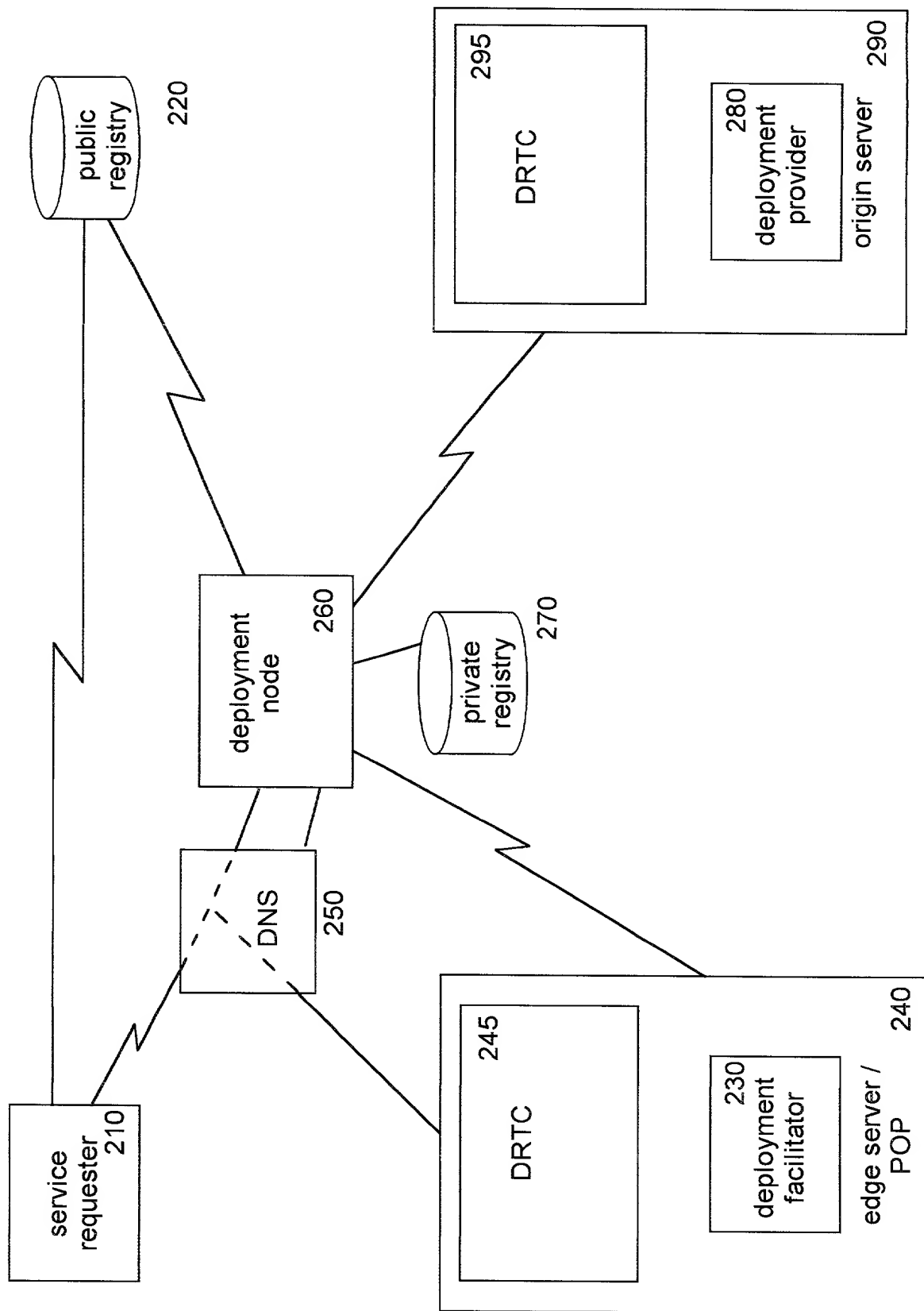


FIG. 3

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UDDI Binding Key	POP	Usage Counter
xxx	San. Fran.	100
xxx	NYC	33

FIG. 4

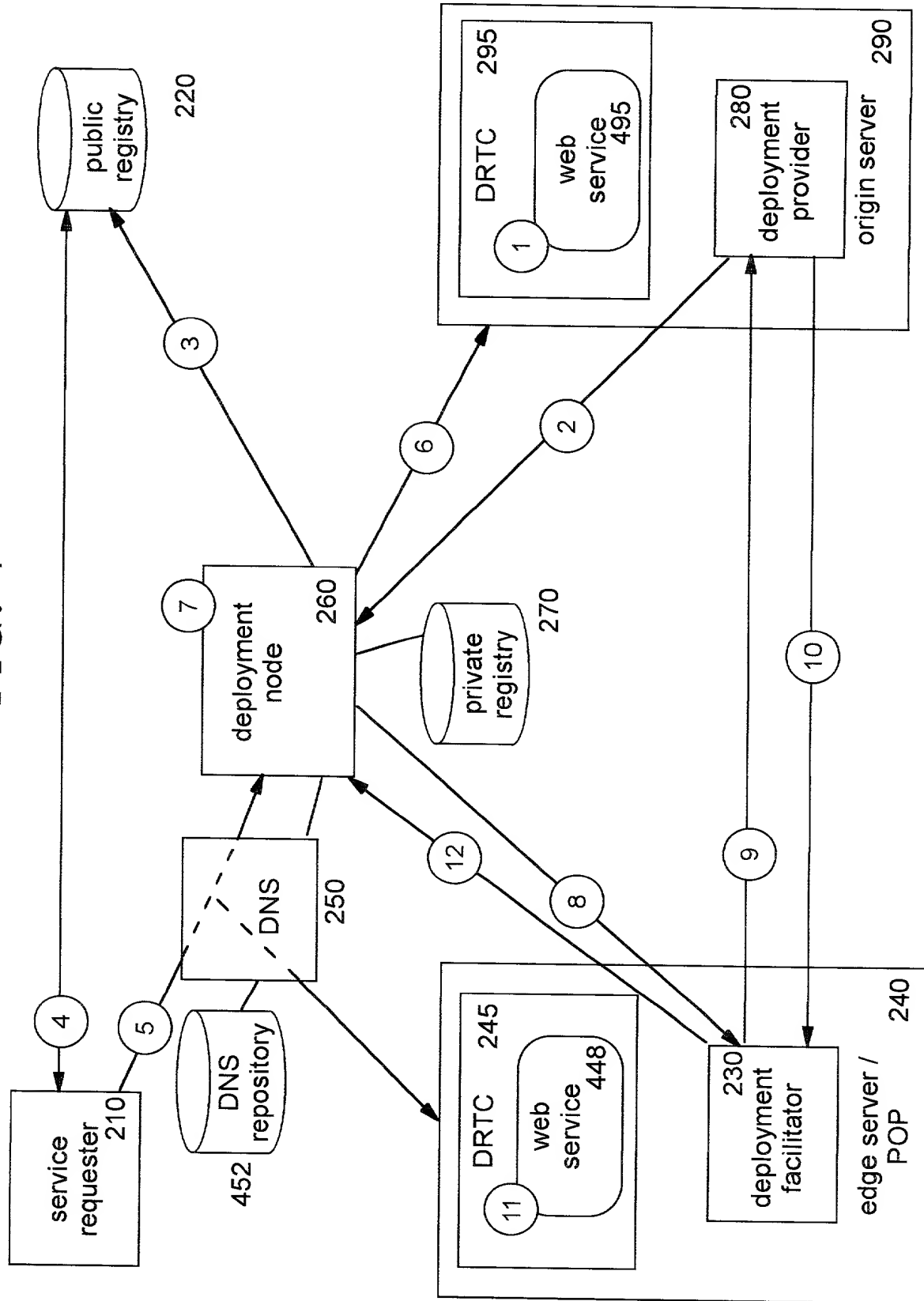


FIG. 5A

```
<?xml version="1.0"?>
<definitions name="Deployment-interface"
  targetNamespace="http://www.acme.com/Deployment-interface"
  xmlns:xsd="http://www.w3.org/2000/10/XMLSchema"
  xmlns:xsd1="http://www.acme.com/deploy/schema"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns="http://schemas.xmlsoap.org/wsdl/">

  <types>
    <schema targetNamespace="http://www.acme.com/deploy/schema"
      xmlns="http://www.w3.org/2000/10/XMLSchema">
      <element name="ArchiveRef">
        <attribute name="href" type="uriReference"/>
      </element>
      <complexType name="ArrayOfBinary">
        <complexContent>
          <restriction base="soapenc:Array">
            <attribute ref="soapenc:arrayType" arrayType="xsd:binary[]"/>
          </restriction>
        </complexContent>
      </complexType>
    </schema>
  </types>

  <message name="DeploymentRequest">
    <part name="serviceName" type="xsd:string"/>
    <part name="runtimeEnvironment" type="xsd:string"/>
  </message>

  <message name="DeploymentResponse">
    <part name="archiveRef" element="xsd1:ArchiveRef"/>
    <part name="serviceArchive" type="xsd1:ArrayOfBinary"/>
  </message>
```

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FIG. 5B

```
<portType name="DeploymentProvider">
540 <operation name="getDeployedService">
    <input message="tns:DeploymentRequest"/>
    <output message="tns:DeploymentResponse"/>
</operation>
</portType>

<binding name="DeploymentProviderBinding" type="tns:DeploymentProvider">
    <soap:binding style="rpc"
        transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name="getDeployedService">
        <soap:operation soapAction="http://www.acme.com/deploy"/>
        <input>
            <soap:body use="encoded"
                namespace="urn:www.acme.com:deploy"
                encodingStyle="http://schemas.xmlsoap.org/soap/encoding/" />
        </input>
        <output>
            <mime:multipartRelated>
            <mime:part>
                <soap:body parts="archiveRef" use="literal"
                    namespace="urn:www.acme.com:deploy"/>
            </mime:part>
            <mime:part>
                <mime:content part="serviceArchive"
                    type="application/octet-stream"/>
            </mime:part>
            </mime:multipartRelated>
        </output>
    </operation>
</binding>
</definitions>
```

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FIG. 5B

FIG. 5C

```
<?xml version="1.0"?>
<definitions name="Deployment"
  targetNamespace="http://www.acme.com/Deployment"
  xmlns:xsd="http://www.w3.org/2000/10/XMLSchema"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:interface="http://www.acme.com/Deployment-interface"
  xmlns="http://schemas.xmlsoap.org/wsdl/">

  <import namespace="http://www.acme.com/Deployment-interface"
    location="http://www.acme.com:80/services/Deployment-interface.wsdl"/>

  <service name="DeploymentProvider">
    <documentation>Acme.Com Deployment Service</documentation>
    <port name="DeploymentProvider" binding="interface:DeploymentProviderBinding">
      <soap:address location="http://www.acme.com:80/soap/servlet/rpcrouter"/>
    </port>
  </service>
</definitions>
```

FIG. 6

POST /ServiceDeployment HTTP/1.1

Host: www.acme.com

Content-Type: text/xml; charset="utf-8"

Content-Length: nnnn

SOAPAction: "http://www.acme.com/deploy"

<SOAP-ENV:Envelope

xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"

SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">

<SOAP-ENV:Body>

<m:getDeployedService xmlns:m="urn:www.acme.com:deploy">

610 <serviceName>urn:www.acme.com:stockquoteservice</serviceName>

620 <runtimeEnvironment>Windows 2000, Apache SOAP V2.1,
Java</runtimeEnvironment>

</m:getDeployedService>

</SOAP-ENV:Body>

</SOAP-ENV:Envelope>

FIG. 7

HTTP/1.1 200 OK

MIME-Version: 1.0

Content-Type: Multipart/Related; boundary=MIME_boundary; type=text/xml,
start="<http://www.acme.com/deployment061400a.xml>"

Content-Description: This is the optional message description.

--MIME_boundary

Content-Type: text/xml; charset=UTF-8

Content-Transfer-Encoding: 8bit

Content-ID: <<http://www.acme.com/deployment061400a.xml>>

Content-Location: http://www.acme.com/deployment061400a.xml

```
<?xml version='1.0' ?>
```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="

http://schemas.xmlsoap.org/soap/envelope/">

<SOAP-ENV:Body>

```
<m:getDeployedServiceResponse xmlns:m="urn:www.acme.com:deploy">
```

710 <ArchiveRef href="http://www.acme.com/com/foo/stockgoutservice.ear" />

</m:getDeployedServiceResponse>

...

</SOAP-ENV:Body>

</SOAP-ENV:Envelope>

--MIME boundary

Content-Type: application/octet-stream

Content-Transfer-Encoding: binary

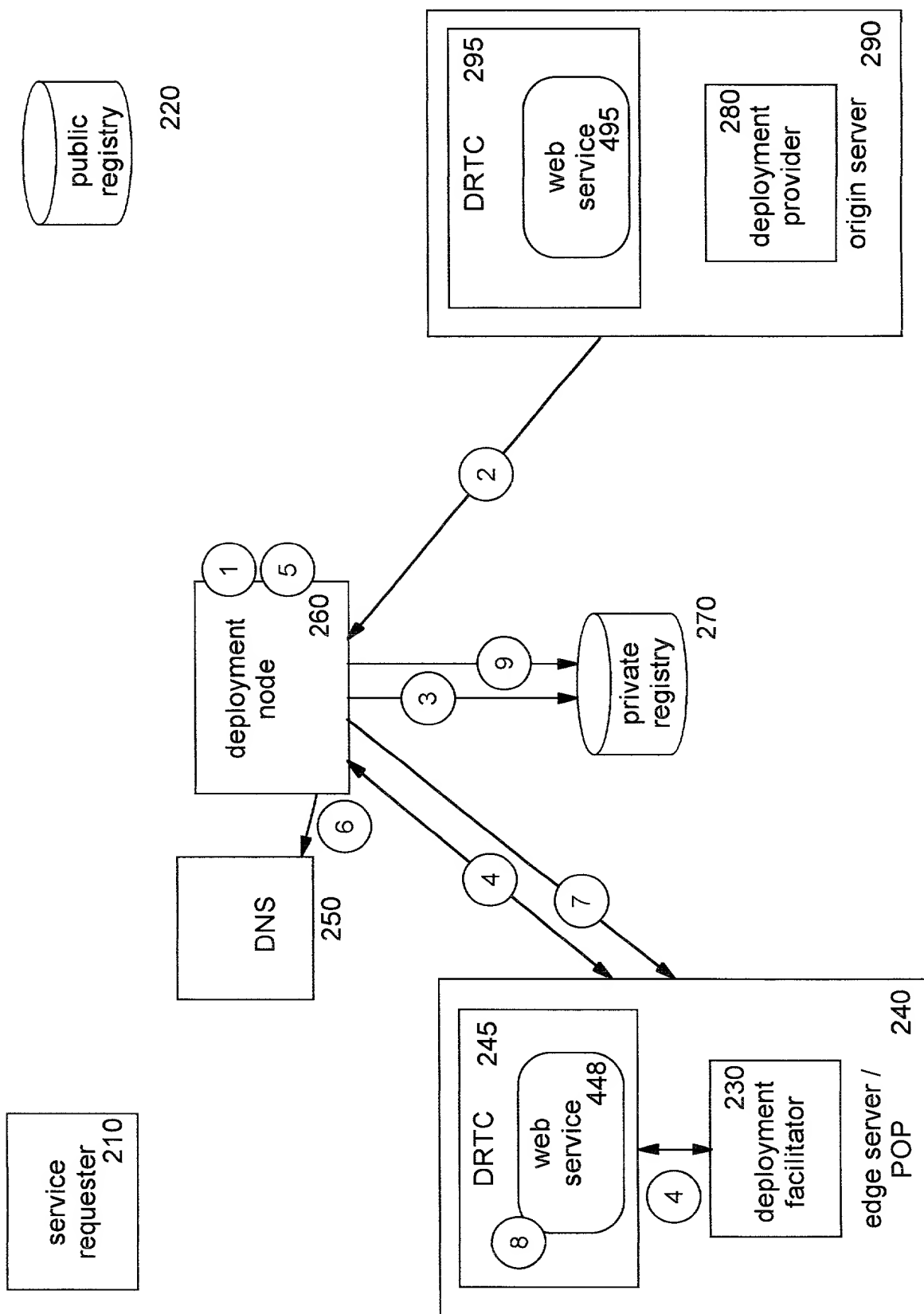
720 Content-ID: <http://www.acme.com/com/foo/stockquoteservice.ear>

Content-Location: <http://www.acme.com/foo/stockgoutesservice.ear>

730 ... binary EAR file ...

--MIME boundary--

FIG. 8



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FIG. 9

Deployed Service	Deployed to
xxx	1.2.3.4
xxx	4.3.2.1
yyy	1.2.3.4
zzz	5.6.7.8

FIG. 10

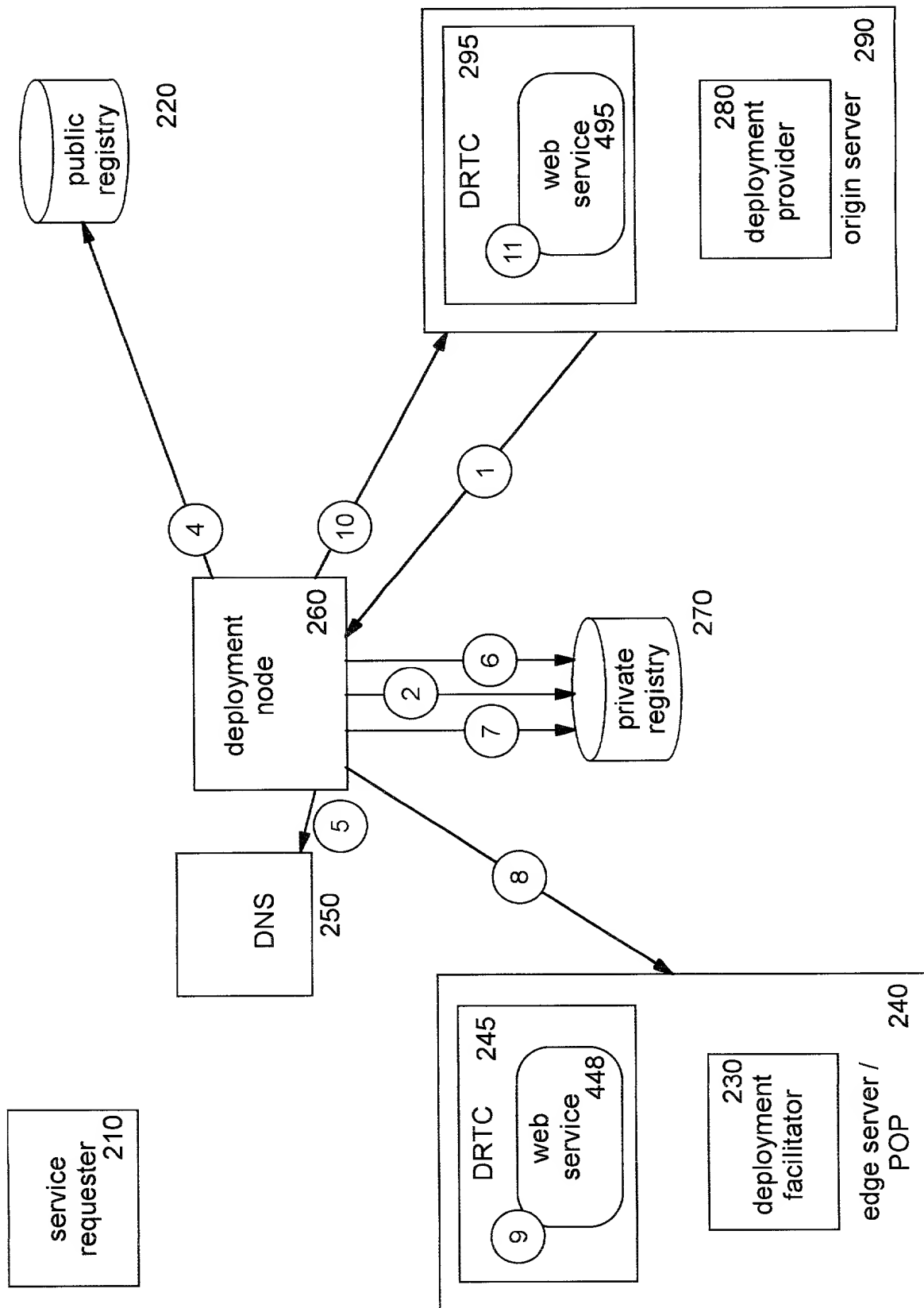


FIG. 11

